

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing of claims in the application:

Please cancel claims 225-329 without prejudice or disclaimer.

Please add new claims 330 - 439.

330. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:
a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and
a processing subsystem receiving and processing said at least one data stream, wherein said processing subsystem includes a memory having an indexed hierarchical data storage structure including at least one device index tree indexed by a device identifier and by date stamp data, and wherein said processing subsystem is adapted to encrypt said data stream and write said encrypted data stream to said indexed hierarchical data storage structure indexed by said device identifier and by said date stamp data.

331. (New) The monitoring system of claim 330, wherein said at least one sensing device comprises a temperature sensor.

332. (New) The monitoring system of claim 330, wherein said at least one sensing device comprises a seismic sensor.

333. (New) The monitoring system of claim 330, wherein said at least one sensing device comprises a pressure sensor.

334. (New) The monitoring system of claim 330, wherein said at least one sensing device comprises an airflow sensor.

335. (New) The monitoring system of claim 330, wherein said at least one sensing device comprises a weight sensor.

336. (New) The monitoring system of claim 330, wherein said sensing subsystem includes a plurality of portable sensing devices, wherein said plurality of portable sensing devices are disposed so that each of a plurality of serving or storage containers has disposed therein at least one of said plurality of portable sensing devices.

337. (New) The monitoring system of claim 330, wherein said sensing subsystem includes a plurality of portable sensing devices and a central transmitter, wherein said central transmitter is in communication with each of said plurality of portable sensing devices, and wherein said central transmitter is further in communication with said processing subsystem.

338. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:
a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and
a processing subsystem receiving and processing said at least one data stream,
wherein said sensing subsystem is adapted so that sensing devices can be added to or deleted from said sensing subsystem, wherein said processing subsystem includes a display, and wherein said processing system is adapted to output on said display graphical indicia indicating each of said sensing devices connected to said system.

339. (New) The monitoring system of claim 338, wherein said at least one data stream includes an identifier.

340. (New) The monitoring system of claim 338, wherein said sensing subsystem includes a plurality of portable sensing devices, wherein said plurality of portable sensing devices are disposed so that each of a plurality of serving or storage containers has disposed therein at least one of said plurality of portable sensing devices.

341. (New) The monitoring system of claim 338, wherein said at least one sensing device is adapted to be in contact with food.

342. (New) The monitoring system of claim 338, wherein said sensing subsystem includes a plurality of portable sensing devices and a central transmitter, wherein said central transmitter is in communication with each of said plurality of portable sensing devices, and wherein said central transmitter is further in communication with said processing subsystem.

343. (New) The monitoring system of claim 338, wherein said at least one sensing device is a portable sensing device comprising a temperature sensor.

344. (New) The monitoring system of claim 338, wherein said at least one sensing device comprises an airflow sensor.

345. (New) The monitoring system of claim 338, wherein said at least one sensing device comprises first and second sensing devices, each generating a data stream so that said at least one data stream includes at least one data stream from each of said first and second sensing devices, wherein said processing subsystem is configured to at least one of time or date stamp at least one data stream from said first sensing device and at least one data stream from said second sensing device.

346. (New) The monitoring system of claim 338, wherein said at least one sensing device comprises a weight sensor.

347. (New) The monitoring system of claim 338, wherein said at least one sensing device is a portable device in a form of a fork, knife, or spoon.

348. (New) The monitoring system, of claim 338, wherein said system is configured so that said sensing device is a portable sensing device adapted to wirelessly transmit said at least one data stream to said processing subsystem.

349. (New) The monitoring system of claim 338, wherein said at least one sensing device comprises first and second portable sensing devices, each generating a data stream so that said at least one data stream includes at least one data stream from each of said first and second portable sensing devices, wherein said processing subsystem is configured to compress at least one data stream from said first sensing device and at least one data stream from said second sensing device.

350. (New) The monitoring system of claim 338, wherein said at least one sensing device comprises first and second sensing devices, each generating a data stream so that said at least one data stream includes at least one data stream from each of said first and second sensing devices, wherein said processing subsystem is configured to determine whether a data stream received therein corresponds to a sensing device which is newly added to said system.

351. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:
a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and
a processing subsystem receiving and processing said at least one data stream, wherein said sensing subsystem is adapted so that sensing devices can be added to or deleted from said sensing subsystem, wherein said at least one sensing device comprises a plurality of sensing devices currently logging data, wherein said processing subsystem includes a display and a memory, and wherein said processing system is adapted to output on said display graphical indicia indicating each of said sensing devices which is currently logging data.

352. (New) The monitoring system of claim 351, wherein said at least one sensing device comprises first and second sensing devices, each generating a data stream so that said at least one data stream includes at least one data stream from each of said first and second sensing devices, wherein said first and second sensing devices are configured so that at least one data stream from said first sensing device and at least one data stream from said second device include data corresponding to an identifier.

353. (New) The monitoring system of claim 351, wherein said sensing subsystem includes a plurality of sensing devices, wherein said plurality of sensing devices are disposed so that each of a plurality of serving or storage containers has disposed therein at least one of said plurality of sensing devices.

354. (New) The monitoring system of claim 351, wherein said sensing subsystem includes a plurality of portable sensing devices and a central transmitter, wherein said central transmitter is in communication with each of said plurality of portable sensing devices, and wherein said central transmitter is further in communication with said processing subsystem.

355. (New) The monitoring system of claim 351, wherein said at least one sensing device comprises a cooking utensil incorporating a temperature sensor.

356. (New) The monitoring system of claim 351, wherein said at least one sensing device comprises first and second sensing devices, each generating a data stream so that said at least one data stream includes at least one data stream from each of said first and second sensing devices, wherein said processing subsystem is configured to determine whether a data stream received therein corresponds to a sensing device which is newly added to said system.

357. (New) The monitoring system of claim 351, wherein said at least one sensing device comprises first and second sensing devices, each generating a data stream so that said at least one data stream includes at least one data stream from each of said first and second sensing devices, wherein said processing subsystem is configured to time or date stamp at least one data stream from said first sensing device and at least one data stream from said second sensing device.

358. (New) The monitoring system of claim 351, wherein said at least one sensing device comprises a pressure sensor.

359. (New) The monitoring system, of claim 351, wherein said system is configured so that said at least one sensing device is a portable sensing device adapted to wirelessly transmit said at least one data stream.

360. (New) The monitoring system of claim 351, wherein said at least one sensing device comprises first and second portable sensing devices, each generating a data stream so that said at least one data stream includes at least one data stream from each of said first and second portable sensing devices, wherein said processing subsystem is configured to compress at least one data stream from said first sensing device and at least one data stream from said second sensing device.

361. (New) The monitoring system of claim 351, wherein said at least one sensing device is a portable device including a temperature sensor.

362. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:
a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and

a processing subsystem receiving and processing said at least one data stream, wherein said processing subsystem includes a display and a memory, wherein said processing subsystem is adapted to execute a polling routine wherein said processing subsystem analyzes the content of data in said memory to determine the identity of each sensing device included in said system, and to determine which of said sensing devices are currently logging data, wherein said processing subsystem is adapted to output on said display graphical indicia responsive to said polling routine indicating each of said sensing devices which has been connected to said system, and to further output on said display a logging icon for each device which is currently logging data.

363. (New) The monitoring system of claim 362, wherein said at least one sensing device is a cooking utensil incorporating a sensor.

364. (New) The monitoring system claim 362, wherein said at least one sensing device is provided by a probe having an elongated hollow pin section, said elongated hollow pin section incorporating a sensor.

~~365. (New) The monitoring system of claim 362, wherein said at least one sensing device is a portable device including a temperature sensor.~~

366. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:

a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and

a processing subsystem nonintegral with said at least one sensing device receiving and processing said at least one data stream,

wherein said at least one data stream includes an identifier and sensor data, and wherein said sensing device is a cooking utensil incorporating a sensor.

367. (New) The monitoring system of claim 366, wherein said identifier identifies a sensing device.

368. (New) The monitoring system of claim 366, wherein said identifier identifies a sensing device type.

369. (New) The monitoring system of claim 366, wherein said sensor-incorporating utensil is a fork.

370. (New) The monitoring system of claim 366, wherein said sensor-incorporating utensil is a spoon.

371. (New) The monitoring system of claim 366, wherein said sensor-incorporating utensil is a knife.

372. (New) The monitoring system of claim 366, wherein said sensor-incorporating utensil is a ladle.

373. (New) The monitoring system of claim 366, wherein said at least one sensing device is a portable device including a battery and wherein said at least one data stream includes a battery power level indicator.

374. (New) The monitoring system of claim 366, wherein said processor subsystem includes a display, and wherein said processor subsystem is adapted to display on said display said sensor data generated by said at least one sensing device.

375. (New) A monitoring system monitoring food present in at least first and second serving or storage containers, said monitoring system comprising:

a sensing subsystem including first and second sensing devices generating first and second data streams, said first sensing device adapted to be disposed in said first serving or storage container having food, said second sensing device adapted to be disposed in said second serving or storage container; and

a processing subsystem receiving and processing said first and second data streams, wherein said first and second sensing devices are cooking utensils incorporating sensors.

376. (New) The monitoring system of claim 375, wherein said processing subsystem includes a display, wherein said first and second data streams include sensor data, and wherein said processing system displays an alarm indicia on said display if said sensor data of one of said data streams satisfies a predetermined criteria.

377. (New) The monitoring system of claim 375, wherein said processing subsystem includes a display, wherein at least one of data streams includes sensor data, and wherein said processing subsystem displays on said display a graph in which said sensor data of at least one of said first and second bit streams is plotted over time.

378. (New) The monitoring system of claim 375, wherein said processing subsystem includes a display, wherein said first and second data streams include sensor data, and wherein said processing subsystem displays on said display, for a specific time period specified by a user, a first graph in which sensor data is plotted over time for said first sensing devices, and a second graph in which sensor data is plotted over time for said second sensing device.

379. (New) The monitoring system of claim 375, wherein said processing subsystem is adapted to at least one of time stamp or date stamp received data.

380. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:

a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and

a processing subsystem nonintegral with said at least one sensing device receiving and processing said at least one data stream,

wherein said at least one data stream includes an identifier and sensor data, and wherein said at least one sensing device is adapted to be inserted into food.

381. (New) The monitoring system of claim 380, wherein said at least one sensing device is a cooking utensil incorporating a sensor.

382. (New) The monitoring system of claim 380, wherein said at least one sensing device is provided by a probe having an elongated hollow pin section, said elongated hollow pin section incorporating a sensor.

383. (New) The monitoring system of claim 380, wherein said sensing subsystem includes a plurality of sensing devices, wherein said plurality of sensing devices are disposed so that each of a plurality of serving or storage containers has disposed therein at least one of said plurality of sensing devices.

384. (New) The monitoring system of claim 380, wherein said at least one sensing device is a portable device including a battery, wherein said at least one data stream includes battery power level data, wherein said processing subsystem includes a display, and wherein said processing subsystem displays on said display battery power level data indicating a battery power level of said at least one sensing device.

385. (New) The monitoring system of claim 380, wherein said processor subsystem includes a display, and wherein said processor subsystem is adapted to display on said display said data generated by said at least one sensing device.

386. (New) A monitoring system monitoring food present in at least first and second serving or storage containers, said monitoring system comprising:

a sensing subsystem including first and second sensing devices generating first and second data streams, said first sensing device adapted to be disposed in said first serving or storage container, said second sensing device adapted to be disposed in said second serving or storage container; and

a processing subsystem receiving and processing said first and second data streams, wherein said first and second sensing devices are adapted to be inserted into food.

387. (New) The monitoring system of claim 386, wherein said first sensing device is a cooking utensil incorporating a sensor and said second sensing device is a probe incorporating a sensor.

388. (New) The monitoring system of claim 386, wherein said processing subsystem includes a display, wherein said first and second data streams include sensor data, and

wherein said processing system displays an alarm indicia on said display if said sensor data of one of said data streams satisfies a predetermined condition.

389. (New) The monitoring system of claim 386, wherein said processing subsystem includes a display, wherein at least one of data streams includes sensor data, and wherein said processing subsystem displays on said display a graph in which said sensor data of at least one of said first and second bit streams is plotted over time.

390. (New) The monitoring system of claim 386, wherein said first and second sensing devices are portable devices including batteries, wherein said first and second data streams include battery power level data, wherein said processor subsystem includes a display, and wherein said processing subsystem displays on said display battery power level data indicating a battery power level of at least one of said first and second sensing devices.

391. (New) The monitoring system of claim 386, wherein said processing subsystem is adapted to at least one of time stamp or date stamp received data.

392. (New) The monitoring system of claim 386, wherein said processing subsystem includes a display, wherein said first and second data streams include sensor data, and wherein said processing subsystem displays on said display, for a specific time period specified by a user, a first graph in which sensor data is plotted over time for said first sensing devices, and a second graph in which sensor data is plotted over time for said second sensing device.

393. (New) A monitoring system monitoring food stored in at least one serving or storage container, said monitoring system comprising:

a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and

a processing subsystem nonintegral with said at least one sensing device receiving and processing said at least one data stream,

wherein said at least one data stream includes an identifier and sensor data, and wherein said sensing device is provided by a probe having an elongated hollow pin section, said elongated hollow pin section incorporating a sensor.

394. (New) The monitoring system of claim 393, wherein said sensing subsystem includes a plurality of sensing devices, wherein said plurality of sensing devices are disposed so that each of a plurality of serving or storage containers has disposed therein at least one of said plurality of sensing devices.

395. (New) The system of claim 393, wherein said identifier identifies a sensing device.

396. (New) The system of claim 393, wherein said identifier identifies a sensing device type.

397. (New) The system of claim 393, wherein said identifier identifies a container.

398. (New) The monitoring system of claim 393, wherein said at least one sensing device is a portable device including a battery and wherein said at least one data stream includes a battery power level indicator.

399. (New) A monitoring system monitoring food present in at least first and second serving or storage containers, said monitoring system comprising:

a sensing subsystem including first and second sensing devices generating first and second data streams, said first sensing device adapted to be disposed in said first serving or storage container, said second sensing device adapted to be disposed in said second serving or storage container; and

a processing subsystem receiving and processing said first and second data streams, wherein said first and second sensing devices are each provided by a probe having an elongated hollow pin section, said elongated hollow pin section of each probe incorporating a sensor.

400. (New) The monitoring system of claim 399, wherein said processing subsystem includes a display, wherein said first and second data streams include sensor data, and wherein said processing system monitors said sensor data and displays an alarm indicia on said display if said sensor data of one of said data streams satisfies a predetermined condition.

401. (New) The monitoring system of claim 399, wherein said processing subsystem includes a display, wherein at least one of data streams includes sensor data, and wherein said processing subsystem displays on said display a graph in which said sensor data or at least one of said first and second bit streams is plotted over time.

402. (New) The monitoring system of claim 399, wherein said processing subsystem includes a display, wherein said first and second data streams include sensor data, and wherein said processing subsystem displays on said display, for a specific time period specified by a user, a first graph in which sensor data is plotted over time for said first sensing devices, and a second graph in which sensor data is plotted over time for said second sensing device.

403. (New) The monitoring system of claim 399, wherein said processing subsystem is adapted to at least one of time stamp or date stamp received data.

404. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:

a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and

a processing subsystem nonintegral with said at least one sensing device receiving and processing said at least one data stream,

wherein said at least one data stream includes an identifier, and wherein said at least one sensing device incorporates a seismic sensor.

405. (New) The monitoring system of claim 404, where said sensing subsystem includes a first portable sensor device incorporating a seismic sensor and generating a first data stream, and a second portable sensor device also incorporating a seismic sensor and generating a second data stream, and wherein said processor subsystem receives and processes said first and second data streams.

406. (New) The monitoring system of claim 404, wherein said at least one sensing device is adapted to be inserted into food.

407. (New) The system of claim 404, wherein said sensor device is a cooking utensil incorporating a sensor.

408. (New) The monitoring system of claim 404, wherein said at least one sensing device is a portable device including a battery and wherein said at least one data stream includes a battery power level indicator.

409. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:
a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and
a processing subsystem nonintegral with said at least one sensing device receiving and processing said at least one data stream,
wherein said at least one data stream includes an identifier, and wherein said at least one sensing device includes a pressure sensor.

410. (New) The monitoring system of claim 409, where said sensing subsystem includes a first portable sensor device incorporating a pressure sensor and generating a first data stream, and a second portable sensor device also incorporating a pressure sensor and generating a second data stream, and wherein said processor subsystem receives and processes said first and second data streams.

411. (New) The system of claim 409, wherein said at least one data stream includes an identifier identifying said sensing device.

412. (New) The system of claim 409, wherein said at least one sensing device is a cooking utensil incorporating a sensor.

413. (New) The monitoring system of claim 409, wherein said at least one sensing device is a portable device including a battery, and wherein said at least one data stream includes battery power level data.

414. (New) The monitoring system of claim 409, wherein said processor subsystem includes a display, and wherein said processor subsystem is adapted to display on said display data generated by said at least one sensing device.

415. (New) A monitoring system monitoring food stored in first and second serving or storage containers, said monitoring system comprising:

a sensing subsystem including first and second sensing devices generating first and second data streams, said first and second sensing devices adapted to be disposed in said at least one serving or storage container storing food; and

a processing subsystem receiving and processing said first and second data streams, wherein said first and second data streams include sensor data and identifier data, and wherein said processing subsystem is configured to compress at least one of said first and second data streams.

416. (New) The monitoring system of claim 415, wherein said processing subsystem wirelessly receives said first and second data streams.

417. (New) The monitoring system of claim 415, wherein said first and second sensing devices are adapted to contact food.

418. (New) The monitoring system of claim 415, wherein said first and second sensing devices include temperature sensors.

419. (New) The monitoring system of claim 415, wherein said monitoring system is adapted to at least one of time stamp or date stamp said first and second data streams.

420. (New) The monitoring system of claim 415, wherein said processing subsystem includes a display and wherein said processing subsystem is adapted to display a graph plotting said sensor data over time.

421. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:

a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and

a processing subsystem nonintegral with said at least one sensing device receiving and processing said at least one data stream,

wherein said at least one data stream includes an identifier, and wherein said at least one sensing devices includes a weight sensor.

422. (New) The monitoring system of claim 421, where said sensing subsystem includes a first portable sensor device incorporating a weight sensor and generating a first data stream, and a second portable sensor device also incorporating a weight sensor and generating a second data stream, and wherein said processor subsystem receives and processes said first and second data streams.

423. (New) The monitoring system of claim 421, wherein said at least one sensing device is a portable device including a battery.

424. (New) The monitoring system of claim 421, wherein said at least one sensing device is a portable device including a dedicated transmitter for wirelessly transmitting sensor data from said sensor device.

425. (New) The monitoring system of claim 421, wherein said at least one sensing device is adapted to be inserted into food.

426. (New) The monitoring system of claim 421, wherein said processor subsystem includes a display, and wherein said processor subsystem is adapted to display on said display data generated by said at least one sensing device.

427. (New) A monitoring system monitoring food present in at least first and second serving or storage containers, said monitoring system comprising:

a sensing subsystem including first and second sensing devices generating first and second data streams, said first sensing device adapted to be disposed in said first serving or storage container, said second sensing device adapted to be disposed in said second serving or storage container; and

a processing subsystem receiving and processing said first and second data streams, wherein each of said first and second sensing devices includes a battery, and wherein said first and second data streams each include a battery power level indicator.

428. (New) The monitoring system of claim 427, wherein at least one of said sensing devices includes a temperature sensor, and wherein at least one of said data streams includes temperature data.

429. (New) The monitoring system of claim 427, wherein at least said first sensing device is adapted to contact food.

430. (New) The monitoring system of claim 427, wherein at least one of said sensing devices is a cooking utensil incorporating a sensor.

431. (New) The monitoring system of claim 427, wherein at least one of said sensing devices is probe having an elongated pin section, said elongated pin section incorporating a sensor.

432. (New) The monitoring system of claim 427, wherein said each of said first and second sensing devices are adapted to contact food.

433. (New) The monitoring system of claim 427, wherein said processing subsystem includes a display, wherein said first and second data streams include sensor data, and

wherein said processing system is adapted to display an alarm indicia on said display if said sensor data of one of said data streams satisfies a predetermined criteria.

434. (New) The monitoring system of claim 427, wherein said processing subsystem includes a display, wherein at least one of data streams includes sensor data, and wherein said processing subsystem displays on said display a graph in which said sensor data of at least one of said first and second bit streams is plotted over time.

435. (New) The monitoring system of claim 427, wherein said processing subsystem includes a display, wherein said first and second data streams include sensor data, and wherein said processing subsystem displays on said display, for a specific time period specified by a user, a first graph in which sensor data is plotted over time for said first sensing devices, and a second graph in which sensor data is plotted over time for said second sensing device, said first and second graphs being displayed simultaneously.

436. (New) The monitoring system of claim 427, wherein said processor subsystem includes a display, and wherein said processor subsystem is adapted to display on said display data battery power level data indicating a battery power level of at least one of said first and second sensing devices.

437. (New) The monitoring system of claim 427, wherein each of said first and second sensing devices is a portable device adapted to be removably inserted into food.

438. (New) The monitoring system of claim 427, where in said processing subsystem is adapted to time stamp said first and second data streams.

439. (New) A monitoring system monitoring food present in at least one serving or storage container, said monitoring system comprising:
a sensing subsystem including at least one sensing device generating at least one data stream, said at least one sensing device adapted to be disposed in said at least one serving or storage container having food; and
a processing subsystem nonintegral with said at least one sensing device receiving and processing said at least one data stream,
wherein said processing subsystem encrypts data of said at least one data stream.

440. (New) The monitoring system of claim 439, where said sensing subsystem includes a first portable sensor device generating a first data stream, and a second portable sensor device generating a second data stream, and wherein said processor subsystem receives and processes said first and second data streams.

441. (New) The monitoring system of claim 439, wherein said at least one sensing device is adapted to be inserted into food.

442. (New) The system of claim 439, wherein said identifier identifies a sensing device.

443. (New) The system of claim 439, wherein said identifier identifies a sensing device type.

444. (New) The system of claim 439, wherein said identifier identifies a container.

445. (New) The system of claim 439, wherein said sensor device is a cooking utensil incorporating a sensor.

446. (New) The monitoring system of claim 439, wherein said at least one sensing device is a portable device including a battery.

447. (New) The monitoring system of claim 439, wherein said at least one sensing device is a portable device including a dedicated transmitter wirelessly transmitting sensor data from said sensor device.

448. (New) The monitoring system of claim 439, wherein said at least one data stream includes sensor data generated by a sensor of said at least one sensing device, and wherein said processing subsystem encrypts said sensor data.

449. (New) The monitoring system of claim 439, wherein said processor subsystem includes a display, and wherein said processor subsystem is adapted to display on said display data generated by said at least one sensing device.